

Work Order ID **107902**

107902

Page 1

October-07-13 8:26:55 AM

Item ID: 41232-200-007-001

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Brass Cylinder Assembly

Start Date: 10/07/13 Start Qty: 6.00

6

Cust Item ID:

Required Date: 10/21/13 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals: Process Plan: MJS

Date: 13-10-07 Tooling:

Date:

Run Start ***NR1***

QC:

Date: SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

41232-200-007

Rev 1R

100		0.00							
100	PURCHASING								
Purchasing	Memo	0.00							
Purchasing	Issue P/O: <u>21623</u> Possible Supplier: Wainbee Material release note is required								

CL 13/10/08 (6)

110	Receive & Inspect for Damage & Mat'l Certs	0.00							
-----	--	------	--	--	--	--	--	--	--

110

Packaging	Memo	0.00							
Packaging	Ensure material certification is attached								

13/14/25 (6)

120	QC5- Inspect part completeness to step on W/O	0.00							
-----	---	------	--	--	--	--	--	--	--

120

QC	Memo	0.00							
Quality Control									

9-89 27 DAS
B 10 25

6

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Work Order Update ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
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Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric to O/S ☐ Cracks ☐ Crushed/Crimped ☐ Cuffs ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Ripples in Bend ☐ Torque Waves in Extrusion ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damaged ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drill Holes ☐ Drawing ☐ Finish ☐ Folio	☐ Grain ☐ Hardware ☐ Inspection Incomplete ☐ Instructions Incomplete/Unclear ☐ Maintenance ☐ Mislabeled ☐ Misread ☐ Offset ☐ Out of Calibration ☐ Out of Sequence ☐ Outside Dimensions	☐ Ovalized ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge	☐ Pressure/Forced ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Page 2

Item ID: 41232-200-007-001

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N900040100

Setup Start ***NS1***

Revision ID:

Item Name: Brass Cylinder Assembly

Stop ***NS2***

Start Date: 10/07/13 Start Qty: 6.00

6

Cust Item ID:

Required Date: 10/21/13 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130

SprayPaint

0.00

130

SprayPaint

Memo

0.00

Mask threaded ends and threaded holes. 1-Apply polyimide
primerBatch: 126558 2-Apply polyurathane
coating gloss blackBatch: 127534

Note:Paint Nut on threaded end and leave attached to assembly

140

QC14- Inspect Spray Paint

0.00

140

QC

Memo

0.00

Quality Control

150

Packaging

0.00

150

Packaging

Memo

0.00

Install Decal then

Identify and StockLocation: ST600

DAS
6
9-89

6

FF

MAR 30 2017

DAS
41
9-89

MAR 30 2017

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Work Order Update ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Crosstube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data ☐											
Equip/Tooling ☐											
Operator ☐											
Material ☐											
Setup ☐											
Other ☐											
Process ☐											
Supplier ☐											
Training ☐											
Unapproved ☐											
FAULT CATEGORY											
Landing Gear ☐ Bending ☐ Centre Not Concentric to O/S ☐ Cracks ☐ Crushed/Crimped ☐ Cuffs ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Ripples in Bend ☐ Torque Waves in Extrusion ☐ Turning Sequence ☐ Wave/Twist in Tube			General ☐ Bend ☐ BOM/Route ☐ Broken/Damaged ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drill Holes ☐ Drawing ☐ Finish ☐ Folio			☐ Grain ☐ Hardware ☐ Inspection Incomplete ☐ Instructions Incomplete/Unclear ☐ Maintenance ☐ Mislabeled ☐ Misread ☐ Offset ☐ Out of Calibration ☐ Out of Sequence ☐ Outside Dimensions			☐ Ovalized ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other		

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Start Date: 10/07/13 Start Qty: 6.00 ***6***

Cust Item ID:

Required Date: 10/21/13 Req'd Qty: 6.00 ***6***

Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date:

Run Start ***NR1***

QC: Date: SPC (Y/N): Date:

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

QC21- Final Inspection - Work Order Release

0.00

160

QC

Memo

0.00

Quality Control

17/4/3 JF

DAS
21
9-89

MAR 31 2017

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Work Order Update ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
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Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

FAULT CATEGORY

Landing Gear	General	Other
☐ Bending	☐ Bend	☐ Grain
☐ Centre Not Concentric to O/S	☐ BOM/Route	☐ Hardware
☐ Cracks	☐ Broken/Damaged	☐ Inspection Incomplete
☐ Crushed/Crimped	☐ Burrs	☐ Instructions Incomplete/Unclear
☐ Cuffs	☐ Contamination	☐ Maintenance
☐ Heat Treat	☐ Countersink	☐ Mislabeled
☐ Inspection Strip in Tube	☐ Cut Too Short	☐ Misread
☐ Ripples in Bend	☐ Drill Holes	☐ Offset
☐ Torque Waves in Extrusion	☐ Drawing	☐ Out of Calibration
☐ Turning Sequence	☐ Finish	☐ Out of Sequence
☐ Wave/Twist in Tube	☐ Folio	☐ Outside Dimensions
		☐ Ovalized
		☐ Over/Under tolerance
		☐ Part Incorrect
		☐ Part Lost/Missing
		☐ Part Moved
		☐ Positioned Wrong
		☐ Power Loss/Surge
		☐ Pressure/Forced
		☐ Temperature/Cure
		☐ Weld
		☐ Wrong Stock Pulled
		☐ Other

* Picklist Print

October-07-13 8:26:58 AM

Page 1
1

Work Order ID: 107902

107902

Parent Item: 41232-200-007-001

41232-200-007-001

Parent Item Name: Brass Cylinder Assembly

Start Date: 10/07/13

Required Date: 10/21/13

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP Rev:A New Issue 07-02-23 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
7D-1-H *7D-1-H* Clippard Brass Cylinder		Purchased	No			100	Each	0.0000	1	6			
									**	Proposed (6)			

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

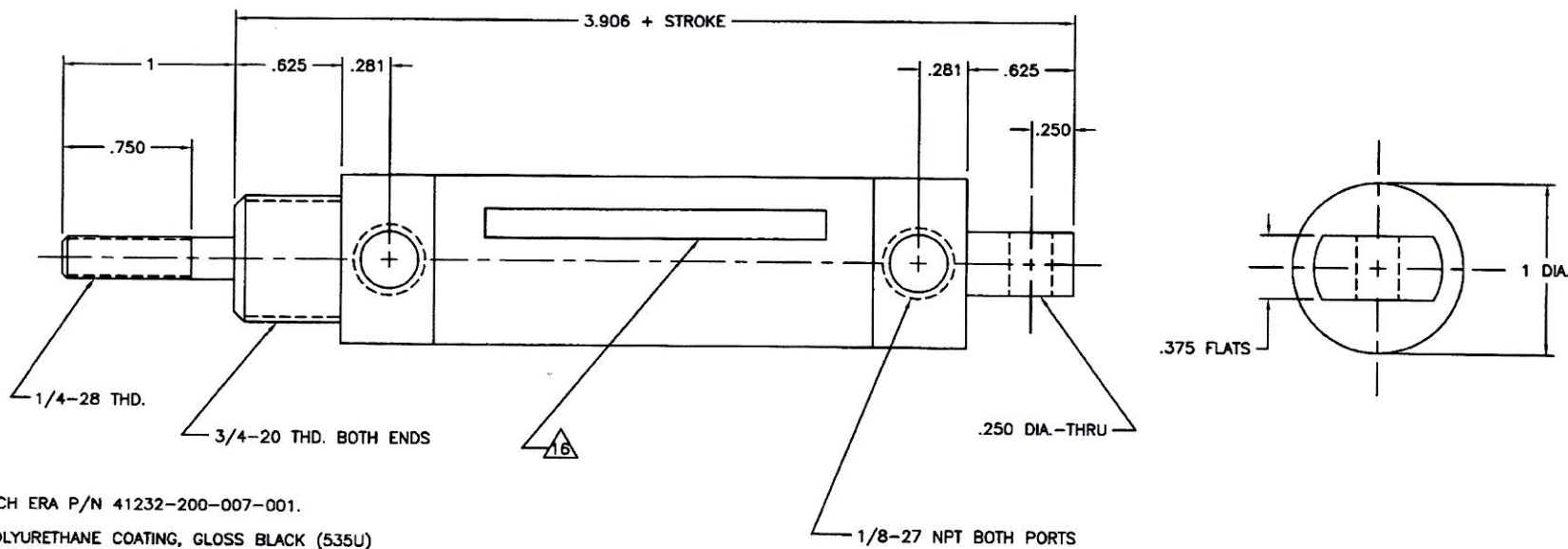
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Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
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Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
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Supplier									
Training									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric to O/S ☐ Cracks ☐ Crushed/Crimped ☐ Cuffs ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Ripples in Bend ☐ Torque Waves in Extrusion ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damaged ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drill Holes ☐ Drawing ☐ Finish ☐ Folio	☐ Grain ☐ Hardware ☐ Inspection Incomplete ☐ Instructions Incomplete/Unclear ☐ Maintenance ☐ Mislabeled ☐ Misread ☐ Offset ☐ Out of Calibration ☐ Out of Sequence ☐ Outside Dimensions
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☐ Ovalized ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge	☐ Pressure/Forced ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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16. VIBRO ETCH ERA P/N 41232-200-007-001.

15. APPLY POLYURETHANE COATING, GLOSS BLACK (535U) IN ACCORDANCE WITH ERA PROCESS SPECIFICATION 4009.

14. APPLY POLYIMIDE PRIMER IN ACCORDANCE WITH ERA PROCESS SPECIFICATION 4004.

13. PRESSURE TEST: 2660 PSI (USE 5606 FLUID).

NOTE - ALTER 7D1H ASSY IN ACCORDANCE WITH INSTRUCTIONS LISTED ABOVE.

-001 BRASS CYLINDER

12. SINTERED BRONZE ROD BUSHING.

11. ROD DIAMETER: 0.25 INCHES.

10. PORTS: 1/8 NPT.

9. POWER FACTOR: 0.6 SQ. IN.

8. STROKE: 1.000 INCH.

7. ACTION: DOUBLE ACTING.

6. MOUNT: UNIVERSAL MOUNT.

5. TEMPERATURE RANGE: 30° F TO 230° F.

4. 7D1H CONFIGURED WITH HYD. FLUID SEALS.

3. ROD: ROTATING.

2. BORE: 0.875 INCHES.

1. HEAVY DUTY BRASS CYLINDERS.

NOTES:

		-001		BRASS CYLINDER 7D1H		CLIPPARD INSTRUMENT LABORATORY, INC., CINCINNATI, OH.							
		PART NO.		NAME		STOCK SIZE		MATERIAL		MATL.SPEC		ZONE	
		NO. REQ'D PER ASSY		LIST OF MATERIAL									
PROPRIETARY RIGHTS NOTICE THESE DATA ARE PROPRIETARY TO ERA AVIATION, INC. DISCLOSURE, REPRODUCTION, OR USE OF THESE DATA FOR ANY PURPOSE IS PROHIBITED WITHOUT WRITTEN AUTHORIZATION FROM ERA AVIATION, INC. THE FOREGOING DOES NOT APPLY TO VENDOR PARTS.						UNLESS OTHERWISE SPECIFIED X ± .1 XX ± .03 XXX ± .010 ANGLES ± .1/2°		DRAFTSMAN D. NELSON 3/14/03 CHECK D. MURPHY 3/14/03 STRESS FINISH ENGR. HEAT TREAT FINISH		TITLE HYDRAULIC CYLINDER (ALTERED ITEM DRAWING) DWG. SIZE C SCALE NONE DWG. NO. 41232-200-007 REV. IR			
		2		41232-000-001									
		NEXT ASSEMBLY											

SHOWN
REVISED
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO CHANGE
WITHOUT NOTICE
WORK ORDER
NO. 107902 MWS
13-10-07

Era Aviation, Inc.



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO21623**

Purchase Order Date 10/8/2013

PO Print Date 10/9/2013

Page Number 1 of 1

Order From :

VC-ROY001

RBC ROYAL BANK - VISA
PAYMENT CENTRE, PO BOX 4016, STAT. A
TORONTO, ON M5W 1X6
CA

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

REVISED
\$ + date.

Contact Name

Vendor Phone

Ship To Contact

Ship To Phone

Ship Via:

FedEx PI collect

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

COD

Currency

CAD

FOB

Destination-Collect

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	7D-1-H	Clippard Brass Cylinder	10/31/2013 Yes 10/31/2013		6.00 Each	\$121.43	\$728.58

AS PER DWG 41232-200-007-001
B107902

WAINBEE P/N: 7D-1-H

Line Total: \$728.58

PO Total: \$728.58

PO Instructions: WAINBEE
VISA: 4516 0500 0527 9033
EXP: 10/16 CID: 351

Note: Pricing listed above is as per contract agreement between Dart Aerospace and the respective manufacturer.

No substitution or deviation without consent.

Certificate of Conformity or Material Certification required - YES NO

PST# 6122-5207



WAINBEE LIMITED
215 BOUL BRUNSWICK
POINTE CLAIRE, QC H9R 4R7
Phone: 514-697-8810 Fax: 514-697-3070

Packing List

CUSTOMER P/O NUMBER	
PO21623	
RELEASE #	15035095-1
DATE	10/23/13 14:47:07

127404
DART AEROSPACE LTD
1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7
613-632-3336

SHIP TO
DART AEROSPACE LTD
1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7

ORDER NUMBER 15035095	ORDER DATE 10/09/13	SHIP DATE 10/23/13	WRITTEN BY Hugues Roy	CONTACT CHANTAL LAVOIE(E)		
CUSTOMER P/O NUMBER PO21623						
JOB #						
RELEASE #						
PRODUCT / DESCRIPTION		QUANTITY OPEN	U/M	QUANTITY SHIPPED	QUANTITY BACKORDERED	PRICE /EXTENSION
7D-1-H CLIPPARD BRASS CYLINDER		6	EA	6	0	121.430
						728.58

Wainbee's Standard Terms and Conditions Apply

Returned Goods Not Accepted Without Prior Authorization.

Claims For Shortages Or Losses Are Not Accepted 10 Days After Shipment.